

Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford and River Corridor Closure Project

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Central Plateau Remediation

On December 3, 2003, only the
process Hood and Stairwell
remain of 233-S



**Infrastructure Reliability/
Real Estate & Land Management**
Electrical Utilities respond to a safety concern

OVERVIEW

This section addresses Project Baseline Summary (PBS) RL-0040, *Nuclear Facility D&D, Remainder of Hanford*. There are three major components to this work scope:

- Deactivation and Decommissioning (M. B. Lackey);
- Reliability Projects (M. B. Lackey); and
- Waste Site Remediation (R. T. Wilde).

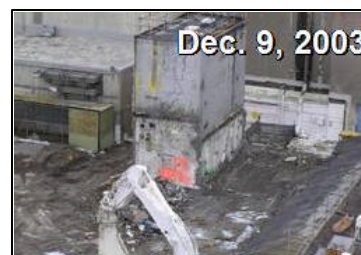
This section includes PBS RL-0041, *Nuclear Facility D&D, River Corridor Closure Project*, until this work scope transitions to the new River Corridor Contractor.

NOTE: Unless otherwise noted, all information contained herein is as of the end of November 2003.

NOTABLE ACCOMPLISHMENTS

Deactivation and Decommissioning

233-S Demolition: The Plutonium Recovery (PR) Airlock, Can Storage Room, PR Can Load-Out and Decontamination Room, Change Room and toilet, Equipment Room, Pipe Gallery, Stairwell, and all ventilation system ductwork have been demolished, loaded into Environmental Restoration Disposal Facility (ERDF) containers. The majority of the waste has been transported to the ERDF and off loaded. This effort represents the first open-air demolition of a significantly contaminated Plutonium facility (several million disintegrations per minute alpha) in the DOE complex. The four-story process hood is the only remaining structure.



U Plant Canyon Demolition Ready: The Regulator comments were incorporated into the Feasibility Study/Proposed Plan for U Plant, and the document was transmitted to RL on December 10, 2003.

224-B and 224-T Demolition: Issued the notification to stakeholders of public comment period for the 224-B Engineering Evaluation/Cost Analysis (EE/CA) on November 14, 2003. The 224-T EE/CA was reviewed with RL, the Environmental Protection Agency (EPA) and the Washington State Department of Ecology. It is anticipated that the notification to stakeholders will be issued on December 15, 2003.

Reliability Projects

Electrical Utilities: Electrical Utilities responded to a safety concern from an off-site contractor performing an excavation near electrical power lines/pole in 200 West. Crews erected a new pole and re-routed the line away from the excavation site. The pole located near the excavation was removed.



Project L-388, Evaporator/Canton Street Water Upgrade: This project designs and constructs a potable water service in the 200 East Area. The existing water service is greatly undersized and may be leaking into an environmentally sensitive area. The 12-inch line will greatly improve the water quality and flow in this area. Pipe installation was initiated in late November 2003.

NOTABLE ACCOMPLISHMENTS, CONTINUED

Hanford Fire Department (HFD) Tender Truck Replacement: This capital equipment purchase replaced a HFD Tender Truck that rolled while in use in 2001. Since the original vehicle has been out of service, the HFD has leased a water truck that does not provide adequate service. The new vehicle was delivered to the Hanford Site for final acceptance by the HFD on November 10, 2003.



Waste Site Remediation

U Plant Regional Acceleration: Draft B of the U Plant Waste Sites Area Closure Focused Feasibility Study/Proposed Plan was transmitted to RL on November 3, 2003. RL, in turn, transmitted it to the regulatory agencies on November 10, 2003.

The drilling contract for confirmatory sampling for the U Plant Waste Sites Area Closure was awarded on November 4, 2003.

The Sampling and Analysis Plan (SAP) for the U Plant Closure Area Waste Sites, DOE-RL-2003-52, Draft A (Post Workshop) was transmitted to RL on November 14, 2003, for submittal to the regulatory agencies.

218-W-4C Burial Ground Data Quality Objectives/SAP: The construction of a Vapor Extraction System at Trench 4 in the 218-W-4C Burial Ground was completed on November 10, 2003, and operations were initiated on November 11, 2003, four days ahead of schedule. The maximum carbon tetrachloride concentration measured at the inlet to the vapor extraction system was approximately 75 parts per million volume (ppmv), and has been reduced to just under 20 ppmv. The objective is to reduce the concentration to 10 ppmv by the time waste retrieval commences on January 15, 2004.

200 Area Common: The Groundwater Protection Program organized a joint RL and Office of River Protection workshop on Alternative Surface Barriers for Waste Site Containment. The workshop was held on November 13, 2003, at the Consolidated Information Center in North Richland. National/World-wide experts discussed alternative surface barrier testing at Hanford, design and testing of surface barriers in an arid climate, and evolution and performance of disposal cell covers for uranium mill tailings. Speakers from Sandia National Laboratory, Stoller-Grand Junction, and the Pacific Northwest National Laboratory were included. Over 40 representatives attended, including several Hanford Advisory Board members and most of the Richland EPA office.

BC Crib Acceleration: Field probe activities in the BC Crib area at the 219-B-58 and 216-B-26 trenches were completed on November 14, 2003. The Preliminary Geophysical logging at both sites was completed on November 18, 2003.

FY 2004 FH FUNDS VS ACTUAL (\$000)

	FY 2004 Anticipated Funding w/Carryover	FY 2004 Fiscal Year Spend Forecast	Variance
RL-0040 Nuclear Facility D&D, Remainder of Hanford	\$ 86,473	\$ 88,224	\$ -1,751
RL-0041 Nuclear Facility D&D, River Corridor Closure	\$ 4,141	\$ 3,460	\$ 681
Total	\$ 90,614	\$ 91,684	\$ -1,070

A Baseline Change Request (BCR) is currently at RL which extends the RL-0041, River Corridor Contract work scope through December 21, 2003. Another BCR is in process to extend the date through March, 2004.

FY 2004 SCHEDULE/COST PERFORMANCE (\$000)

	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance \$	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-0040 Nuclear Facility D&D, Remainder of Hanford	11,021	9,592	10,066	-1,428	-13%	-474	-5%	84,586
RL-0041 Nuclear Facility D&D, River Corridor Closure	1,499	1,591	1,600	92	6%	-9	-1%	3,222
Total	12,520	11,184	11,666	-1,336	-12%	-482	-4%	87,807

NOTE: Numbers are rounded to the nearest \$K.

Schedule Performance (\$-1,336K/-12%): The unfavorable schedule variance in Deactivation and Decommissioning Project is primarily due to continued delays on the 233-S demolition project that result from weather effects. The revised working schedule reflects an April 15, 2004, demolition completion with waste packaging and project close-out completion by June. Also contributing to the unfavorable schedule variance are delays in mobilization and engineering studies at 224-B/224-T/U Plant due to resource availability, delays in issuance of the 224-B/224-T EE/CA's due to redirection of the "plug-in" approach, and not starting U Plant ancillary facilities activities due to FY 2004 funding reductions.

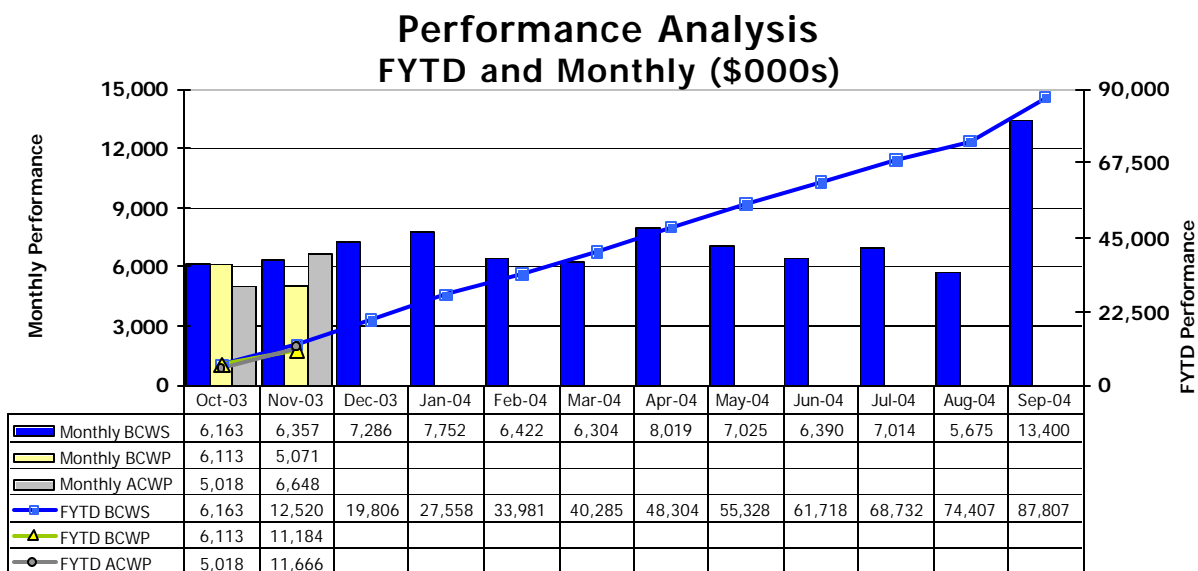
This is offset by the favorable schedule variance in Reliability Projects which is due to positive progress in completion of FY 2003 carryover work scope and Project L-437, *Route 11A Road Overlay*. In addition, deactivation of Mobile Office 382 and eight 300 Area facilities were completed ahead of schedule.

FY 2004 SCHEDULE/COST PERFORMANCE, CONTINUED

Cost Performance (\$-482K/4%): The unfavorable variance for Deactivation and Decommissioning is due to demolition preparation activities being more extensive than planned.

The unfavorable variance is offset by efficiencies in the surveillance and maintenance of general purpose facilities due to mild winter conditions. Entry into vacant facilities to check utilities during freezing temperatures has not been required.

The closure services allocation underrun is due to contracts hold-back and other miscellaneous adjustments. This is expected to self-correct.



MILESTONE ACHIEVEMENT

MSN	Title	Type	Due Date	Actual Date	Forecast Date	Status Comments
TRP-03-224 M-013-00N	Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan	HQ	06/30/04			On schedule
TRP-03-227 M-015-41C	Submit 200-TW-1 & 200-TW-2 OU FS/Proposed Plan to EPA & Ecology	HQ	03/31/04			On schedule
TRP-03-230 M-015-39B	Submit 200-CS-1 Chemical Sewer Group RI Report	HQ	05/31/04			On schedule
TRP-03-233 M-015-43B	Submit 200-PW-2 OU RI Report Including Past Practice Waste Sites	HQ	06/30/04			On schedule
TRP-03-309	233-S (PuConcentration Facility) and the 233-SA (Exhaust Filter Building) demolished to slab on grade.	RL	6/30/2004		4/15/2004	Ahead of schedule
TRP-03-501 M-092-11-T01	Complete Disposition Options for Hanford Site Nonradioactive NA	RL	09/28/04			On schedule
TRP-03-236 M-016-66	Initiate Interm. Des.& Auth for RA at 618-10&11	HQ	09/30/04			On schedule
TRP-04-901 M-92-15	Complete Removal and Transfer, and Initiate Storage of Phase II 300 Area SCW and Materials	EA	9/30/2004	9/19/2001		Completed ahead of schedule
TRP-03-242 M-015-40C	Submit 200-CW-5 U Pond/Z Ditches Cooling Water Group FS & Submit	HQ	10/31/04			On schedule
TRP-03-139 M-013-00O	Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan	HQ	12/31/04			On schedule
TRP-03-260 M-015-46A	200 Areaa Chemical Lab Waste OUs Remedial investigation Report.	HQ	10/31/05			On schedule
TRP-03-245 M-015-39C	Submit 200-CS-1 Chemical Sewer Group FS and Submit PP/Proposed	HQ	11/30/05			On schedule
TRP-03-248 M-020-39	Submit 216 S-10 Pond and Ditch Closure Plan to Ecology	HQ	11/30/05			On schedule
TRP-03-254 M-015-43C	Submit 200-PW-2 OU FS & Proposed Plan/Proposed RCRA Permit Mod	HQ	12/31/05			On schedule
TRP-03-257 M-020-33	Submit Closure/Post Closure Plans for 216-A-10 Crib, Etc.	HQ	12/31/05			On schedule
TRP-03-263 M-015-44A	200-MW-1 OU Remedial Investigation Report	HQ	12/31/05			On schedule
TRP-03-266 M-015-46B	200 Area Chemical Laboratory Waste OUs Feasibility Study	HQ	09/30/06			On schedule
TRP-03-272	Remediate BC Crib, Trenches, and Control Area	RL	09/30/06			On schedule
TRP-03-303	U Plant Regional Closure (ancillary facilities, excluding U Plant Canyon)	RL	9/30/2006			On schedule
TRP-03-312	224-B (Concentration Facility) demolished to slab on grade.	RL	9/30/2006			On schedule - Potential GFS impacts
TRP-03-315	224-T (Transuranic Storage & Assay Facility) demolished to slab on grade.	RL	9/30/2006			On schedule - Potential GFS impacts